

\$110.00 (ONE HUNDRED TEN DOLLARS AND ZERO CENTS). Accordingly, applicant respectfully requests that the Examiner reconsider and withdraw this rejection.

With the double patenting rejection out of the way, the only remaining rejections are the two rejections of Claim 6-11 under 35 USC 112, first paragraph. In the first rejection, Claims 6-11 were rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Official Action persisted in the interpretation of the specification, which according to this interpretation states that the desired particle size cannot be achieved without the presence of a non-ionic, non-fluorine-containing surfactant in a trace amount of 0.001 to 0.1%. The Official Action stated that the words seized upon by applicants, i.e. "usually" and "possible" are not the key words, and the key word is "cannot". In other words, the Official Action stated that the specification states that the particle size cannot be lowered below the 200 nm threshold without the presence of a non-ionic, non-fluoride containing surfactant together with the fluorine-containing surfactant.

In the second rejection, Claims 6-11 were rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The Official Action stated that the non-ionic, non-fluorine-containing surfactant is critical

or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). The Official Action continued that specification clearly states that unless the non-ionic, non-fluorine-containing surfactant is present, the claimed composition cannot be manufactured. Although the amended claim structure of claim 6 does not exclude the presence of a surfactant which does not contain fluorine, it does not affirmatively claim the component, which is essential for achieving the goal of the invention, namely the small particle size, in spite of the high solids concentration.

Applicant respectfully submits that the positions set forth in the aforesaid rejections are not correct. Applicant understands the first rejection to be based on the written description requirement of the first paragraph of 35 U.S.C. § 112. It is also understood that the second rejection is based on the enablement requirement of the first paragraph of 35 U.S.C. § 112.

Applicant respectfully submits that the present specification provides a written description of the invention as set forth in the claims within the meaning of 35 U.S.C. § 112, first paragraph. In applicant's previous response filed on August 27, 2001, applicant quoted the relevant passages of the present specification that show where the present specification provides a written description of the presently claimed invention within the meaning of 35 U.S.C. § 112, first paragraph.

The Official Action took the position that the specification states that the particle size **cannot** be lowered below the 200 nm threshold without the presence of a non-ionic, non-fluoride containing surfactant together with a fluoride containing surfactant. Applicant respectfully submits that the discussion in the outstanding Office Action concerning the word “cannot” does not diminish or refute applicant's previous positions. Based on the applicant's review, the only place in the specification where the word “cannot” occurs is at page 3, line 8. However, the sentence containing the word “cannot” begins with the word “usually.” Applicant respectfully submits that there is a significant difference between stating that something “cannot” be done and stating that something “usually cannot” be done. The latter expression, as used in the present specification, leaves open the possibility that “cannot” is not absolute. Accordingly, applicant respectfully submits that the Official Action has not correctly interpreted the English in applicant's specification. Furthermore, the discussion at page 3, lines 5-10, of applicant's specification (the only place in the specification containing the word “cannot”) occurs in the discussion about the background art, and not the present invention. Accordingly, the use of the word “cannot” in this portion of the specification is irrelevant to the written description or enablement of the presently claimed invention by the remaining portions of the specification.

Applicant respectfully submits that the present specification disclosure would enable one of ordinary skill in the art to prepare the dispersions in

Claims 6-11 were rejected under 35 U.S.C. 112, first paragraph. A Rule 132 declaration of Nobuhiko Tsuda was attached to the response filed on February 23, 1999. For easy review, a copy of this declaration (hereinafter referred to as the first Tsuda declaration) is attached to this response. The first Tsuda declaration demonstrates that the descriptions in applicant's specification disclosure at, for example, page 4, lines 7-12, and the limitations in Claim 6-11 are enabled by the present specification. Namely, the first Tsuda declaration establishes that one of ordinary skill in the art, after a review of applicant's specification disclosure, would be enabled to prepare an aqueous dispersion of a vinylidene fluoride polymer, which comprises, *inter alia*, a vinylidene fluoride polymer having an average particle size of not more than 200 nm and a surfactant, wherein a solid content is from 30 to 50 % by weight, a content of the surfactant is not more than 1% by weight on the basis of water, and the surfactant consists essentially of at least one of a fluorine-containing surfactant, as defined in Claims 6-11.

Applicant's specification disclosure explains that the addition of a very small amount of the nonionic non-fluorine-containing surfactant can be used to prepare an aqueous dispersion of a vinylidene fluoride polymer. See, for example, Comparative Examples 4 and 5 on pages 12 and 13 of applicant's specification disclosure. While use of the nonionic non-fluorine-containing surfactant, together with the non-fluorine-containing surfactant, may have been preferable at the time the present specification was written, applicant's

specification disclosure would enable one of ordinary skill in the art prepare the presently claimed aqueous dispersion without the non-fluorine-containing surfactant.

One of ordinary skill in the art would be enabled to prepare an aqueous dispersion of a vinylidene fluoride polymer using only a non-ionic non-fluorine-containing surfactant. Perhaps, the question concerning enablement is: How much of the nonionic non-fluorine-containing surfactant must be used alone in order to obtain the particle size of 200 nm? The attached first Tsuda declaration demonstrates that one of ordinary skill in the art following the teachings of the present specification disclosure would be enabled to prepare an aqueous dispersion of a vinylidene fluoride polymer comprising from 30 to 50 % by weight vinylidene fluoride polymer particles having an average particle size of not more than 200 nm, which contains not more than 1% by weight on the basis of water of nonionic non-fluorine-containing surfactant, and no non-fluorine-containing surfactant.

In the first Tsuda declaration, the aqueous dispersion in accordance with Comparative Example 5 was initially prepared. This dispersion contained the nonionic non-fluorine-containing surfactant of an ammonium salt of perfluoro(octanoic acid) (PFOA) in an amount of 2.0% by weight to water, and a vinylidene fluoride polymer solid content of 31.5% with an average particle size of 196.3 nm. Thereafter, a portion of the fluorine-containing surfactant was removed to prepare an aqueous dispersion (solid content: 32.3 wt%, fluorine-

containing surfactant content: 0.78 wt% to water, an average particle size: 198 nm). This concentrated aqueous dispersion having a low content of fluorine-containing surfactant was very stable for a long time and did not produce any precipitation of surfactant in the dry film.

In the first Tsuda declaration, the initially prepared dispersion containing 2.0% of the surfactant PFOA was concentrated using an evaporator for three hours in a hot-water bath of 80°C under a reduced pressure of 100 mm Hg. The resulting aqueous dispersion had a solid content of 32.3% by weight and an average particle size of 198 nm, and an amount of the surfactant PFOA of 0.78% by weight to water. While this concentration step is not described in applicant's specification disclosure, applicant respectfully submits that any person skilled in this art would know how to so concentrate an aqueous dispersion. The concentrating of dispersions and compositions is within the skill of the art and can be performed by freshman chemistry students. In particular, the use of an evaporator or other means to concentrate dispersions and compositions would not pose any difficulty for the skilled artisan.

For such reasons, applicant respectfully submits that the invention as set forth in Claims 6-11 is enabled by the present specification disclosure within the meaning 35 U.S.C. § 112, first paragraph. Therefore, applicant respectfully requests that the Examiner reconsider and withdraw this rejection.

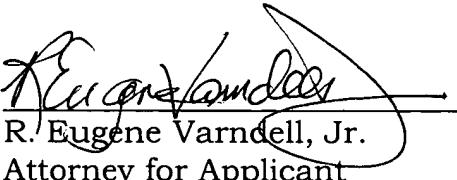
For the foregoing reasons, applicant respectfully submits that the presently claimed invention is enabled by the present specification disclosure

within the meaning of 35 U.S.C. § 112, first paragraph, and that the present specification disclosure provides a written description of the claimed invention within the meaning of 35 U.S.C. § 112, first paragraph. Therefore, applicant respectfully requests that the Examiner reconsider and withdraw these rejections.

While it is believed that the present response places the application in condition for allowance, should the Examiner have any comments or questions, it is respectfully requested that the undersigned be telephoned at the below listed number to resolve any outstanding issues.

In the event this paper is not timely filed, applicant hereby petitions for an appropriate extension of time. The fee therefor, as well as any other fees which may become due, may be charged to our Deposit Account No. 22-0256.

Respectfully submitted,  
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